

GOVERNMENT OF GOA  
QUALITY CONTROL LABORATORY  
WATER RESOURCES DEPARTMENT

Test Report No.: WRD / QC / F.6-2 / Cube -T : 8981,8994,9020,9035,9055,/ Lab / **497**/ 2019 - 20 Dated:- 21/ 03 / 2020 Laboratory : Bicholim - Goa.  
9066,9088,9103,9117,9134,9146,9158,9171,9187,9205,9223,9235 & 9256 Sub Division V (QC)/WRD/ Bicholim- Goa.

**Name of Work: - Improvement to various Nallahs in fields from Sagar Shetyes house to Prakash Shetgaonkars fields, Subhash Salkar house to Eliton house at Aradi, Vetal Temple to Main Nallah, Suresh Halarnkar field to Main Nallah at Vaddem, Sarvesh Volvoikar house to Polle house at Bhutkiwada in village Panchayat Socorro in Porvorim Constituency.**

Ref. to Requisition No.: - SDII/WDI/WRD/ F.24 /2019-20/649 Dated :- 25/02/2020.

Qty. Recived. : 18 Sets of cube Date of Receipt: 26/03/2020. Tested on: 02/03/2020 To 21 /03/2020. as per due dates. Ref to CPWD :2009, Vol. I

Sample: Cube 1:2:4 Mix O.S No. :3325,3335,3357,3367,3383,3393,3411,3433,3443,3457,3465/SS,633/SP,3470,3481,3495,3515,3530,3547/SS

Lab. Sample No.: 8128 to 8145 Tested By: Mrs. S.B. Naik Shirodkar. J.E. & Mr. S.M. Patri, AE

**Cube test is witnessed by Shri. Zubair KM., representative of Nooruddin Construction on 21/03/2020. , REPORT PAGE No 1 OF PAGE NO 3**

| SR.N O. | DISCRIPTION OF SAMPLE  | TESTED FOR                                | RESULTS        |                      | Max./Min.Value permissable | % above or below | REMARK  |
|---------|--|---|----------------|----------------------|----------------------------|------------------|---|
| 1       | Cement concrete cube of mix 1:2:4 , cast on 03/02/2020, for Foundation. Quantity represents 14.00 Cum. | 28 <sup>th</sup> day compressive strength | 231.06         | Kg/Cm2               | 210 kg/cm2                 | 6.07             | Exact location of work done is not specified. |
|         |  |   | 212.93         | Kg/Cm2               |                            |                  |   |
|         |  |   | 224.26         | Kg/Cm2               |                            |                  |   |
|         |  |   | <b>Average</b> | <b>222.75 Kg/Cm2</b> |                            |                  |   |
| 2       | Cement concrete cube of mix 1:2:4 , cast on 04/02/2020, for Foundation. Quantity represents 14.00 Cum. | 28 <sup>th</sup> day compressive strength | 228.79         | Kg/Cm2               | 210 kg/cm2                 | 3.91             | ... Do ...                                    |
|         |  |   | 217.47         | Kg/Cm2               |                            |                  |   |
|         |  |   | 208.40         | Kg/Cm2               |                            |                  |   |
|         |  |   | <b>Average</b> | <b>218.22 Kg/Cm2</b> |                            |                  |   |
| 3       | Cement concrete cube of mix 1:2:4 , cast on 05/02/2020, for Foundation. Quantity represents 13.00 Cum. | 28 <sup>th</sup> day compressive strength | 215.20         | Kg/Cm2               | 210 kg/cm2                 | 3.55             | ... Do ...                                    |
|         |  |   | 228.79         | Kg/Cm2               |                            |                  |   |
|         |  |   | 208.40         | Kg/Cm2               |                            |                  |   |
|         |  |   | <b>Average</b> | <b>217.47 Kg/Cm2</b> |                            |                  |   |
| 4       | Cement concrete cube of mix 1:2:4 , cast on 06/02/2020, for Foundation. Quantity represents 14.00 Cum. | 28 <sup>th</sup> day compressive strength | 217.47         | Kg/Cm2               | 210 kg/cm2                 | 9.31             | ... Do ...                                    |
|         |  |   | 233.32         | Kg/Cm2               |                            |                  |   |
|         |  |   | 237.85         | Kg/Cm2               |                            |                  |   |
|         |  |   | <b>Average</b> | <b>229.55 Kg/Cm2</b> |                            |                  |   |
| 5       | Cement concrete cube of mix 1:2:4 , cast on 07/02/2020, for Foundation. Quantity represents 12.00 Cum. | 28 <sup>th</sup> day compressive strength | 226.53         | Kg/Cm2               | 210 kg/cm2                 | 2.48             | ... Do ...                                    |
|         |  |   | 210.67         | Kg/Cm2               |                            |                  |   |
|         |  |   | 208.40         | Kg/Cm2               |                            |                  |   |
|         |  |   | <b>Average</b> | <b>215.20 Kg/Cm2</b> |                            |                  |   |
| 6       | Cement concrete cube of mix 1:2:4 , cast on 08/02/2020, for Foundation. Quantity represents 12.00 Cum. | 28 <sup>th</sup> day compressive strength | 219.73         | Kg/Cm2               | 210 kg/cm2                 | 7.51             | ... Do ...                                    |
|         |  |   | 226.53         | Kg/Cm2               |                            |                  |   |
|         |  |   | 231.06         | Kg/Cm2               |                            |                  |   |
|         |  |   | <b>Average</b> | <b>225.77 Kg/Cm2</b> |                            |                  |   |

Junior Engineer

Assistant Engineer

| SR.N<br>O. | DISCRIPTION OF SAMPLE   | TESTED FOR                                      | RESULTS        |               | Max./Min.Value<br>permissable | % above or<br>below | REMARK  |
|------------|---|---|----------------|---------------|-------------------------------|---------------------|---|
| 7          | Cement concrete cube of mix 1:2:4 , cast on 10/02/2020, for Foundation. Quantity represents 14.00 Cum.                      | 28 <sup>th</sup> day<br>compressive<br>strength | 222.00         | Kg/Cm2        | 210 kg/cm2                    | 6.07                | Exact location of work done is not specified. |
|            |   |   | 237.85         | Kg/Cm2        |                               |                     |   |
|            |   |   | 208.40         | Kg/Cm2        |                               |                     |   |
|            |   |   | <b>Average</b> | <b>222.75</b> |                               |                     |   |
| 8          | Cement concrete cube of mix 1:2:4 , cast on 11/02/2020, for Foundation. Quantity represents 14.00 Cum.                      | 28 <sup>th</sup> day<br>compressive<br>strength | 203.87         | Kg/Cm2        | 210 kg/cm2                    | 4.99                | ... Do ...                                    |
|            |   |   | 219.73         | Kg/Cm2        |                               |                     |   |
|            |   |   | 237.85         | Kg/Cm2        |                               |                     |   |
|            |   |   | <b>Average</b> | <b>220.49</b> |                               |                     |   |
| 9          | Cement concrete cube of mix 1:2:4 , cast on 12/02/2020, for Foundation. Quantity represents 13.00 Cum.                      | 28 <sup>th</sup> day<br>compressive<br>strength | 226.53         | Kg/Cm2        | 210 kg/cm2                    | 4.63                | ... Do ...                                    |
|            |   |   | 217.47         | Kg/Cm2        |                               |                     |   |
|            |   |   | 215.20         | Kg/Cm2        |                               |                     |   |
|            |   |   | <b>Average</b> | <b>219.73</b> |                               |                     |   |
| 10         | Cement concrete cube of mix 1:2:4 , cast on 13/02/2020, for Foundation. Quantity represents 12.00 Cum.                      | 28 <sup>th</sup> day<br>compressive<br>strength | 212.93         | Kg/Cm2        | 210 kg/cm2                    | 7.51                | ... Do ...                                    |
|            |   |   | 226.53         | Kg/Cm2        |                               |                     |   |
|            |   |   | 237.85         | Kg/Cm2        |                               |                     |   |
|            |   |   | <b>Average</b> | <b>225.77</b> |                               |                     |   |
| 11         | Cement concrete cube of mix 1:2:4 , cast on 14/02/2020, for Foundation. Quantity represents 14.00 Cum.                      | 28 <sup>th</sup> day<br>compressive<br>strength | 215.20         | Kg/Cm2        | 210 kg/cm2                    | 3.91                | ... Do ...                                    |
|            |   |   | 203.87         | Kg/Cm2        |                               |                     |   |
|            |   |   | 235.59         | Kg/Cm2        |                               |                     |   |
|            |   |   | <b>Average</b> | <b>218.22</b> |                               |                     |   |
| 12         | Cement concrete cube of mix 1:2:4 , cast on 15/02/2020, for Foundation. Quantity represents 14.00 Cum.                      | 28 <sup>th</sup> day<br>compressive<br>strength | 203.87         | Kg/Cm2        | 210 kg/cm2                    | 3.20                | ... Do ...                                    |
|            |   |   | 217.47         | Kg/Cm2        |                               |                     |   |
|            |   |   | 228.79         | Kg/Cm2        |                               |                     |   |
|            |   |   | <b>Average</b> | <b>216.71</b> |                               |                     |   |
| 13         | Cement concrete cube of mix 1:2:4 , cast on 17/02/2020, for Foundation & Road Crossing wall. Quantity represents 12.00 Cum. | 28 <sup>th</sup> day<br>compressive<br>strength | 240.12         | Kg/Cm2        | 210 kg/cm2                    | 9.67                | ... Do ...                                    |
|            |   |   | 233.32         | Kg/Cm2        |                               |                     |   |
|            |   |   | 217.47         | Kg/Cm2        |                               |                     |   |
|            |   |   | <b>Average</b> | <b>230.30</b> |                               |                     |   |
| 14         | Cement concrete cube of mix 1:2:4 , cast on 18/02/2020, for Foundation & Coping wall. Quantity represents 13.00 Cum.        | 28 <sup>th</sup> day<br>compressive<br>strength | 210.67         | Kg/Cm2        | 210 kg/cm2                    | 4.99                | ... Do ...                                    |
|            |   |   | 212.93         | Kg/Cm2        |                               |                     |   |
|            |   |   | 237.85         | Kg/Cm2        |                               |                     |   |
|            |   |   | <b>Average</b> | <b>220.49</b> |                               |                     |   |

Junior Engineer

Assistant Engineer

| SR.N<br>O. | DISCRIPTION OF SAMPLE  | TESTED FOR                                      | RESULTS       |               | Max./Min.Value<br>permissable | % above or<br>below | REMARK  |
|------------|--|---|---------------|---------------|-------------------------------|---------------------|---|
| 15         | Cement concrete cube of mix 1:2:4 , cast on 19/02/2020, for Foundation. Quantity represents 14.00 Cum. | 28 <sup>th</sup> day<br>compressive<br>strength | 215.20        | Kg/Cm2        | 210 kg/cm2                    | 3.20                | Exact location of work done is not specified. |
|            |  |   | 203.87        | Kg/Cm2        |                               |                     |   |
|            |  |   | 231.06        | Kg/Cm2        |                               |                     |   |
|            |  | <b>Average</b>                                  | <b>216.71</b> | <b>Kg/Cm2</b> |                               |                     |   |
| 16         | Cement concrete cube of mix 1:2:4 , cast on 20/02/2020, for Foundation. Quantity represents 14.00 Cum. | 28 <sup>th</sup> day<br>compressive<br>strength | 206.14        | Kg/Cm2        | 210 kg/cm2                    | 3.55                | ... Do ...                                    |
|            |  |   | 222.00        | Kg/Cm2        |                               |                     |   |
|            |  |   | 224.26        | Kg/Cm2        |                               |                     |   |
|            |  | <b>Average</b>                                  | <b>217.47</b> | <b>Kg/Cm2</b> |                               |                     |   |
| 17         | Cement concrete cube of mix 1:2:4 , cast on 21/02/2020, for Foundation. Quantity represents 14.00 Cum. | 28 <sup>th</sup> day<br>compressive<br>strength | 231.06        | Kg/Cm2        | 210 kg/cm2                    | 5.35                | ... Do ...                                    |
|            |  |   | 226.53        | Kg/Cm2        |                               |                     |   |
|            |  |   | 206.14        | Kg/Cm2        |                               |                     |   |
|            |  | <b>Average</b>                                  | <b>221.24</b> | <b>Kg/Cm2</b> |                               |                     |   |
| 18         | Cement concrete cube of mix 1:2:4 , cast on 22/02/2020, for Foundation. Quantity represents 14.00 Cum. | 28 <sup>th</sup> day<br>compressive<br>strength | 199.34        | Kg/Cm2        | 210 kg/cm2                    | 4.27                | ... Do ...                                    |
|            |  |   | 235.59        | Kg/Cm2        |                               |                     |   |
|            |  |   | 222.00        | Kg/Cm2        |                               |                     |   |
|            |  | <b>Average</b>                                  | <b>218.98</b> | <b>Kg/Cm2</b> |                               |                     |   |

Copy to: 1. The Assistant Engineer, SD II, WD I, WRD, Mapusa - Goa.

2. Copy submitted to the Superintending Engineer ,CPO,WRD, Sinchai Bhavan, Porvorim Goa for kind Information.

3. Copy submitted to the Executive Engineer ,WD I,WRD, Porvorim Goa.

4. QC Lab File. 5. Bill File.

Junior Engineer

Assistant Engineer